

I hereby certify that this correspondence is being electronically transmitted to the United States Patent and Trademark Office on May 9, 2007.

Glenn P. Ladwig  
Glenn P. Ladwig, Patent Attorney

REQUEST FOR CORRECTED  
FILING RECEIPT  
Examining Group 1647  
Patent Application  
Docket No. EPI-104XC1  
Serial No. 10/550,675

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit : 1647  
Applicants : Shabnam Tangri, Bianca Mothe, Alessandro Sette, Scott Southwood, Kristen Briggs, Robert W. Chesnut  
Serial No. : 10/550,675  
Filed : September 26, 2005  
Conf. No. : 8341  
For : Peptides, Polypeptides, and Proteins of Reduced Immunogenicity and Methods for Their Production

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

REQUEST FOR CORRECTED FILING RECEIPT

Sir:

The applicants respectfully request the correction of an error in the Filing Receipt for the above-identified patent application. Please send a corrected Filing Receipt with the following change:

The Filing Receipt lists the Domestic Priority data of the application as:

This application is a 371 of PCT/US04/10353 04/02/2004  
which claims benefit of 60/459,939 04/02/2003

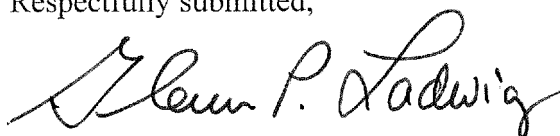
The correct Domestic Priority data of the subject application is:

This application is a 371 of PCT/US2004/010353 04/02/2004  
which claims benefit of 60/459,939 04/02/2003.

**This application is also a CIP of 10/103,395 03/20/2002  
which is a CON of 09/009,953 01/21/1998  
which claims benefit of 60/036,713 01/23/1997 and  
60/037,432 02/07/1997.**

Attached is a copy of a Preliminary Amendment that was submitted when the subject application was filed amending the "Cross-Reference to Related Applications" section of the specification on page 1, line 6. Also attached is a copy of the executed Declaration under 37 C.F.R. §1.63, which was submitted to the Patent Office on May 18, 2006. A copy of the Filing Receipt containing the error is also attached.

Respectfully submitted,



Glenn P. Ladwig  
Patent Attorney  
Registration No. 46,853  
Phone No.: 352-375-8100  
Fax No.: 352-372-5800  
Address: P.O. Box 142950  
Gainesville, FL 32614-2950

GPL/bra

Attachments: Copy of Preliminary Amendment  
Copy of executed Declaration under 37 C.F.R. §1.63  
Copy of Filing Receipt with error noted thereon



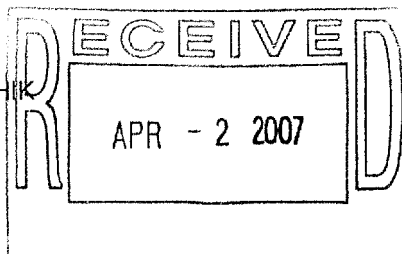
## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov

APPL NO.	FILING OR 371(c) DATE	ART UNIT	FIL FEE REC'D	ATTY DOCKET NO	TOT CLMS	IND CLMS
10/550,675	05/22/2006	1647	2130	EPI-104XC1	7	5

23557

SALIWANCHIK LLOYD & SALIWANCHIK  
 A PROFESSIONAL ASSOCIATION  
 PO BOX 142950  
 GAINESVILLE, FL 32614-2950



CONFIRMATION NO. 8341

FILING RECEIPT



\*OC000000023128329\*

Date Mailed: 03/29/2007

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).**

**Applicant(s)**

Shabnam Tangri, San Diego, CA;  
 Bianca Mothe, Oceanside, CA;  
 Alessandro Sette, La Jolla, CA;  
 Scott Southwood, Santee, CA;  
 Kristen Briggs, Del Mar, CA;  
 Robert W. Chesnut, Cardiff-by-the-Sea, CA;

**Power of Attorney:** The patent practitioners associated with Customer Number 23557.

**Domestic Priority data as claimed by applicant**

This application is a 371 of PCT/US04/10353 04/02/2004  
 which claims benefit of 60/459,939 04/02/2003

The present application is also a CIP of 10/103,395 03/20/2002

**Foreign Applications** which is a CON of 09/009,953 01/21/1998  
 which claims benefit of 60/036,713 01/23/1997 and  
 60/037,432 02/07/1997

**If Required, Foreign Filing License Granted:** 03/27/2007

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US10/550,675**

**Projected Publication Date:** 07/05/2007

**Non-Publication Request:** No

September 26, 2005

PRELIMINARY AMENDMENT  
Patent Application  
Docket No. EPI-104XC1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Docket No. : EPI-104XC1  
Applicants : Shabnam Tangri, Bianca Mothe, Alessandro Sette, Scott Southwood,  
Kristen Briggs, Robert W. Chesnut  
For : Peptides, Polypeptides, and Proteins of Reduced Immunogenicity and  
Methods for Their Production

MS PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

COPY

PRELIMINARY AMENDMENT

Please amend the above-identified application as follows:

COPY

In the Specification

**Please replace paragraph [0001] on page 1 of the specification with the following paragraph:**

[0001] ~~This application~~ This application is the National Stage of International Application Number PCT/US2004/010353, filed April 2, 2004, which claims benefit of priority under 35 U.S.C. § 119(e)(1) to U.S. Provisional Patent Application No. 60/459,939, filed April 2, 2003 (each of which is hereby incorporated by reference in its entirety). The present application also is a continuation-in-part of U.S. Patent Application No. 10/103,395, filed March 20, 2002, which is ~~a continuation-in-part~~ continuation of U.S. Patent Application No. 09/009,953, filed January 21, 1998, now U.S. Patent No. 6,413,517, issued July 2, 2002, which claims benefit of priority under 35 U.S.C. § 119(e)(1) to U.S. Provisional Patent Application Nos. 60/036,713, filed January 23, 1997 and 60/037,432 filed February 7, 1997, each of which is incorporated herein by reference in its entirety, including all amino acid and/or polynucleotide sequences, sequence listings, figures, claims, and tables.

**Please replace paragraph [00170] on page 63 of the specification with the following paragraph:**

[00170] For the present study, peptides were derived from the amino acid sequences of salmon calcitonin (amino acids 83-114 of P01263) (SEQ ID NO:4), human erythropoietin (amino acids 28-193 of P01588) (SEQ ID NO:3), human growth hormone 1 isoform 1 (amino acids 27-217 of P01241) (SEQ ID NO:5), human insulin alpha (amino acids 90-110 of P01308) (SEQ ID NO:6), human insulin beta (amino acids 25-54 of P01308) (SEQ ID NO:7), and human interferon beta (amino acids 22-187 of AAC41702) (SEQ ID NO:8) ~~[see Figure 11].~~

**Please replace paragraph [00253] on page 102 of the specification with the following paragraph:**

[00253] To confirm that the EPO epitope analogs with disrupted HLA-DR binding affinity were less immunogenic, we utilized PBMC from 5 donors that had responded previously wild-type EPO and against the wild type EPO epitopes EPO 101 and EPO 136 and tested peptide combinations using the primary *in vitro* immunogenicity assay. In each case, we included one analog from the EPO 101 epitope, and one from of the EPO 136 epitope. These peptides were

COPY

pooled in equimolar concentrations and tested; the wild-type epitopes EPO 101 and EPO 136 were also pooled at equimolar concentrations and used as positive controls. For each combination, the magnitude of responses net SFC and frequency of response in 10 individual cultures from each donor were recorded. ~~The data obtained are shown in Figure 12.~~ Immunogenicity of the two wild-type EPO epitopes (EPO 101-115 and EPO 136-150) in the form of synthetic peptides, or EPO epitope analog combinations C2 (L102P and S146D), C3 (T107D and S146D) C4 (L102G, T107D and S146D) and C5 (L102S, T107D and S146D) were tested in primary *in vitro* induction assays. Ten individual cultures each from five different donors were tested.

**Please delete paragraphs [0039] and [0040] on page 14 of the specification.**

**After page 137: Please insert as new page 138 the attached Abstract of the Disclosure.**

In the Drawings

Please insert the attached new pages 1-19 of drawings (Figures 1-10) after page 138 (Abstract of the Disclosure) of the application.

In the Claims

Claims 1-26 (Cancelled)

Claim 27 (New): A composition of matter comprising:

- a) an isolated or purified modified erythropoietin construct (MEC) selected from the group consisting of: SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 12, SEQ ID NO: 13, SEQ ID NO: 14, and truncated modified erythropoietin constructs of lengths X to Y, wherein X is an integer selected from 1, 2, 3, 4, 5, or 6 and Y is an integer selected from 188, 189, 190, 191, 192, or 193; or
- b) an isolated or purified modified erythropoietin construct according to a), further comprising a heterologous polypeptide sequence; or
- c) an isolated MEC of a) or b), and a carrier or diluent; or
- d) an isolated, purified, or recombinant nucleic acid encoding a MEC according to a) or b); or
- e) an isolated, purified, or recombinant nucleic acid according to d), further comprising regulatory elements, vector elements, or other nucleic acid elements; or
- f) a host cell transformed with an isolated nucleic acid according to d) or e); or
- g) an isolated, purified or recombinant polynucleotide sequence comprising a sequence encoding a polypeptide sequence selected from the group consisting of SEQ ID NO: 10, 11, 12, 13, 14, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, and 244; or



- h) an isolated, purified or recombinant polynucleotide sequence comprising a complementary polynucleotide sequence to a polynucleotide sequence encoding a polypeptide sequence selected from the group consisting of SEQ ID NO: 10, 11, 12, 13, 14, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, and 244; or
- i) an isolated, purified or recombinant polynucleotide sequence comprising a polynucleotide sequence having at least about 20% to 99.99% identity to a polynucleotide sequence of g) or h); or
- j) a fragment of a polynucleotide sequence according to g) or h); or
- k) a peptide, polypeptide, protein, or antibody having reduced immunogenicity as compared to the naturally occurring form of the peptide, polypeptide, or protein while retaining at least 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, or 100% of the biological activity of the unmodified or naturally occurring molecule and said reduced immunogenicity is the result of reduced binding to MHC Class II molecules; or
- l) a peptide, polypeptide, or protein according to k), wherein the peptide, polypeptide, or protein is a therapeutic peptide, polypeptide, protein or antibody used in the diagnosis or treatment of diseases, conditions, or disorders; or
- m) a peptide, polypeptide, protein, or antibody according to c) or k), wherein the peptide, polypeptide, or protein comprises all, or a portion of, IL-1, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-15, IL-16, IL-18, IL-19, IL-23, IL-24, erythropoietin (EPO), insulin, human growth hormone, calcitonin, Factor VIII, G-

- CSF, M-CSF, GM-CSF platelet derived growth factor (PDGF), MSF, FLT-3 ligand, EGF, fibroblast growth factor (FGF); human insulin alpha, human insulin beta, insulin-like growth factors; vascular endothelial growth factor (VEGF); interferons; leukemia inhibitory factor (LIF); ciliary neurotrophic factor (CNTF); oncostatin M; stem cell factor (SCF); transforming growth factors; chemokines, or antibodies selected from the group consisting of REMICADE® (Infliximab); REOPRO® (Abciximab); SIMULECT® (Basiliximab); ZENAPAX® (Daclizumab); HERCEPTIN® (Trastuzumab); SYNAGIS® (Palivizumab); and XOLAIR® (Omalizumab); or
- n) a peptide, polypeptide, protein, or antibody according to m), wherein the protein is EPO and comprises a sequence selected from the group consisting of SEQ ID NOs: 10, 11, 12, 13, 14, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, and 244; or
- o) an isolated, purified, or recombinant erythropoietin (EPO) polypeptide containing a substituted peptide segment, wherein said substituted peptide segment is located at positions G101-Q115 (SEQ ID NO: 40) or D136-R150 (SEQ ID NO: 47), and said substituted peptide segment contains at least one amino acid substitution; or
- p) an isolated protein of n), comprising an amino acid sequence selected from the group consisting of: SEQ ID NO:10; SEQ ID NO:11; SEQ ID NO:12; SEQ ID NO:13; SEQ ID NO:14; SEQ ID NO:152; SEQ ID NO:154; SEQ ID NO:155; SEQ ID NO:159; SEQ ID NO:162; SEQ ID NO:181; SEQ ID NO:187; SEQ ID NO:199; SEQ ID NO:225; SEQ ID NO:226; SEQ ID NO:227; SEQ ID NO:228; SEQ ID NO:229; and SEQ ID NO:233; SEQ ID NO:245; SEQ ID NO:246; and SEQ ID NO:247; or
- q) a peptide, polypeptide, protein, or antibody according to k), l), m), n), o), or p), and a carrier or pharmaceutically acceptable excipient; or
- r) an isolated, purified, or recombinant polynucleotide encoding a peptide, polypeptide,

- protein and/or antibody according to k), l), m), n), o), or p); or
- s) an isolated, purified, or recombinant polynucleotide according to r), further comprising regulatory elements selected from promoters, enhancers, termination sequences, and combinations thereof; or
  - t) a vector comprising an isolated, purified, or recombinant polynucleotide according to r) or s); or
  - u) a host cell comprising an isolated, purified, or recombinant polynucleotide according to r), s), or t); or
  - v) an isolated, purified, or recombinant EPO polypeptide according to o), wherein said EPO polypeptide contains substituted peptide segments at positions G101-Q115 (SEQ ID NO: 40) and D136-R150 (SEQ ID NO: 47); or
  - w) an isolated, purified, or recombinant EPO polypeptide of o) or v), wherein said peptide segments are selected from those peptides set forth in Tables 10A, 10B, 11A, 11B, 12, 13A, 13B, 14A, 14B, or 14C; or
  - x) an isolated, purified, or recombinant EPO polypeptide of claims o) or v), wherein said peptide segment is selected from the group consisting of: SEQ ID NO:152; SEQ ID NO:154; SEQ ID NO:155; SEQ ID NO:159; SEQ ID NO:162; SEQ ID NO:181; SEQ ID NO:187; SEQ ID NO:199; SEQ ID NO:225; SEQ ID NO:226; SEQ ID NO:227; SEQ ID NO:228; SEQ ID NO:229; and SEQ ID NO:233; SEQ ID NO:245; SEQ ID NO:246; and SEQ ID NO:247.

Claim 28 (New): A method of antagonizing an EPO receptor or a method of treating diseases or conditions associated with over-activation of the EPO receptor, comprising administering a composition comprising an EPO variant in amounts sufficient to: 1) block the binding of naturally occurring EPO to its receptor; or 2) reduce the activation levels of the EPO receptor, wherein the EPO variant comprises an amino acid sequence selected from the group consisting of SEQ ID NO: 10, 11, 12, 13, 14, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175,

176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, and 244, and wherein the EPO variant has the ability to bind to the EPO receptor and fails to activate the EPO receptor.

Claim 29 (New): A method of producing a recombinant peptide, polypeptide, protein or antibody comprising the culturing of a host cell according to claim 27 under conditions that allow for the expression of a recombinant peptide, polypeptide, protein or antibody.

Claim 30 (New): The method according to claim 29, further comprising the isolation of the recombinant peptide, polypeptide, protein and/or antibody from the host cell or culture system.

Claim 31 (New): A method for reducing a helper T lymphocyte (HTL) response against a candidate protein comprising: a) selecting a protein; b) analyzing the amino acid sequence of the protein for potential HTL epitopes; and c) modifying the amino acid sequence of the protein by removing the potential HTL epitope and thereby generating an analog protein.

Claim 32 (New): The method according to claim 31, further comprising conducting *in vitro* antigenicity analysis of said candidate protein using helper T-cells.

Claim 33 (New): An isolated, purified, or recombinant polynucleotide comprising a nucleic acid sequence encoding a polypeptide comprising an amino acid sequence selected from the group consisting of SEQ ID NO: 10, 11, 12, 13, 14, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210,

211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, and 247.

Remarks

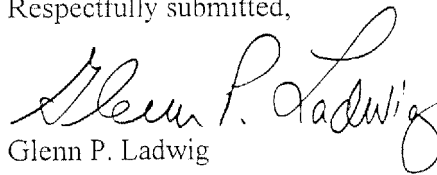
Claims 1-26 were previously pending in the subject international patent application. By this amendment, claims 1-26 have been cancelled, and new claims 27-33 have been added. No new matter has been added by this Amendment. Support for this Amendment can be found throughout the specification and claims as originally filed. Accordingly, claims 27-33 are pending in the subject application.

By this Amendment, the applicants have also amended the specification to update the Cross-Reference to Related Applications section on page 1 and to add an Abstract of the Disclosure as new page 138. In addition, this amendment has been made in order to add pages 1-19 of the Drawings (Figures 1-10) to the application. Support for Figures 1-10 can be found in the provisional application (Serial No. 60/459,939, filed April 2, 2003), which is incorporated by reference at page 1, paragraph [0001], of the subject application in accordance with MPEP §608.01(p) and §2163.07(b). References to Figures 11 and 12 have been deleted. Some of the text of paragraph [0040] at page 14 of the specification has been added to paragraph [00253] at page 102. No new matter has been added by these amendments.

COPY

The Commissioner is hereby authorized to charge any fees under 37 CFR §§1.16, 1.17, or 1.492 as required by this paper to Deposit Account No. 19-0065.

Respectfully submitted,



Glenn P. Ladwig  
Patent Attorney

Registration No. 46,853

Phone No.: 352-375-8100

Fax No.: 352-372-5800

Address: Saliwanchik, Lloyd & Saliwanchik  
A Professional Association  
P.O. Box 142950  
Gainesville, FL 32614-2950

COPY

GPL/mv

Attachments: New Page 138 (Abstract of the Disclosure)  
Pages 1-19 of drawings (Figures 1-10)

Abstract of the Disclosure

The subject invention provides peptides, polypeptides, proteins and/or antibodies of reduced immunogenicity. Also provided are methods of reducing the immunogenicity of peptides, polypeptides, proteins and/or antibodies. In certain embodiments, the immunogenicity  
5 of therapeutic peptides, polypeptides, proteins, and/or antibodies such as hormones, growth factors, and cytokines is reduced.

## DECLARATION (37 C.F.R. § 1.63) AND POWER OF ATTORNEY

As a below-named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name; and

I believe that I am the original, first, and sole inventor (if only one name is listed below), or an original, first, and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled **Peptides, Polypeptides, and Proteins of Reduced Immunogenicity and Methods for Their Production**, specification for which

☐ is attached hereto.

☒ was filed **April 2, 2004**, Serial No. PCT/US2004/010353.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations, § 1.56 (a).

I hereby claim foreign priority benefits under Title 35, United States Code §119 and/or §365 of any foreign application(s) for patent or inventor's certificate listed below and have also identified any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Application Serial No.	Country	Filing Date	Priority Claimed
---------------------------	---------	-------------	------------------

I hereby claim priority benefits under Title 35, United States Code §119 of any provisional application(s) for patent listed below:

Application Serial No.	Filing Date	Priority Claimed
60/459,939	April 2, 2003	Yes
60/037,432	February 7, 1997	Yes
60/036,713	January 23, 1997	Yes

I hereby claim the benefit under Title 35, United States Code, §120 and/or §365 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application(s) in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which became available between the filing date of the prior application and the national or PCT international filing date of this application:

Application Serial No.	Filing Date	Status (Patented, Pending, Abandoned)
10/103,395	March 20, 2002	Abandoned
09/009,953	January 21, 1998	Patented

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of



Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

I hereby appoint the following persons registered to practice before the Patent and Trademark Office as my attorneys with full power of substitution and revocation to prosecute this application and all divisions and continuations thereof and to transact all business in the Patent and Trademark Office connected therewith who are associated with **Customer Number 23557**.

The attorneys/patent agents currently associated with this Customer Number are: David R. Saliwanchik, Reg. No. 31,794; Jeff Lloyd, Reg. No. 35,589; Doran R. Pace, Reg. No. 38,261; Jay M. Sanders, Reg. No. 39,355; Jean Kyle, Reg. No. 36,987; James S. Parker, Reg. No. 40,119; Frank C. Eisenschenk, Reg. No. 45,332; Glenn P. Ladwig, Reg. No. 46,853; Margaret Efron, Reg. No. 47,545; Gwendolyn L. Daniels, Reg. No. 51,594; John M. Sanders, Reg. No. 30,126; Jenna M. Morrison, Reg. No. 55,468; and Mai-Tram Dinh Lauer, Reg. No. 43,589.

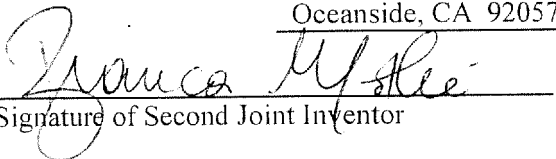
I request that all correspondence be sent to:

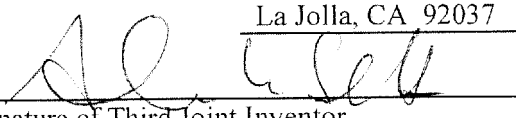
Glenn P. Ladwig  
Saliwanchik, Lloyd & Saliwanchik  
A Professional Association  
PO Box 142950  
Gainesville, FL 32614-2950

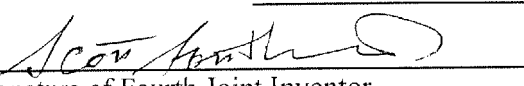
I further request that all telephone communications be directed to:

Glenn P. Ladwig  
352-375-8100

Name of First or Sole Inventor Shabnam Tangri  
Residence San Diego, CA Citizenship India  
Post Office Address 5683 Glenstone Way  
San Diego, CA 92121  
Date \_\_\_\_\_  
Signature of First or Sole Inventor \_\_\_\_\_

.....  
Name of Second Joint Inventor Bianca Mothe  
Residence Oceanside, CA Citizenship Brazil  
Post Office Address 5419 Gooseberry Way  
Oceanside, CA 92057  
 Date October 31, 2005  
Signature of Second Joint Inventor \_\_\_\_\_

.....  
Name of Third Joint Inventor Alessandro Sette  
Residence La Jolla, CA Citizenship Italy  
Post Office Address 5551 Linda Rosa Avenue  
La Jolla, CA 92037  
 Date October 13, 2005  
Signature of Third Joint Inventor \_\_\_\_\_

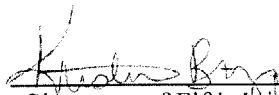
.....  
Name of Fourth Joint Inventor Scott Southwood  
Residence Santee, CA Citizenship U.S.  
Post Office Address 10679 Strathmore Drive  
Santee, CA 92071  
 Date 10/11/05  
Signature of Fourth Joint Inventor \_\_\_\_\_

Name of Fifth Joint Inventor Kristen Briggs

Residence Del Mar, CA Citizenship U.S.

Post Office Address 2454 Mango Way

Del Mar, CA 92014-2919

  
Signature of Fifth Joint Inventor

Date 11-30-2005

.....

Name of Sixth Joint Inventor Robert W. Chesnut

Residence Cardiff-by-the-Sea, CA Citizenship U.S.

Post Office Address 1473 Kings Cross Drive

Cardiff-by-the-Sea, CA 92007

  
Signature of Sixth Joint Inventor

Date Oct 30, 2005

.....

Name of Seventh Joint Inventor \_\_\_\_\_

Residence \_\_\_\_\_ Citizenship \_\_\_\_\_

Post Office Address \_\_\_\_\_

\_\_\_\_\_

Date \_\_\_\_\_

\_\_\_\_\_  
Signature of Seventh Joint Inventor

.....

Name of Eighth Joint Inventor \_\_\_\_\_

Residence \_\_\_\_\_ Citizenship \_\_\_\_\_

Post Office Address \_\_\_\_\_

\_\_\_\_\_

Date \_\_\_\_\_

\_\_\_\_\_  
Signature of Eighth Joint Inventor

## DECLARATION (37 C.F.R. § 1.63) AND POWER OF ATTORNEY

As a below-named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name; and

I believe that I am the original, first, and sole inventor (if only one name is listed below), or an original, first, and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled **Peptides, Polypeptides, and Proteins of Reduced Immunogenicity and Methods for Their Production**, specification for which

☐ is attached hereto.

☒ was filed **April 2, 2004**, Serial No. PCT/US2004/010353.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations, § 1.56 (a).

I hereby claim foreign priority benefits under Title 35, United States Code §119 and/or §365 of any foreign application(s) for patent or inventor's certificate listed below and have also identified any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Application Serial No.	Country	Filing Date	Priority Claimed
---------------------------	---------	-------------	------------------

I hereby claim priority benefits under Title 35, United States Code §119 of any provisional application(s) for patent listed below:

Application Serial No.	Filing Date	Priority Claimed
60/459,939	April 2, 2003	Yes
60/037,432	February 7, 1997	Yes
60/036,713	January 23, 1997	Yes

I hereby claim the benefit under Title 35, United States Code, §120 and/or §365 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application(s) in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which became available between the filing date of the prior application and the national or PCT international filing date of this application:

Application Serial No.	Filing Date	Status (Patented, Pending, Abandoned)
10/103,395	March 20, 2002	Abandoned
09/009,953	January 21, 1998	Patented

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of

Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

I hereby appoint the following persons registered to practice before the Patent and Trademark Office as my attorneys with full power of substitution and revocation to prosecute this application and all divisions and continuations thereof and to transact all business in the Patent and Trademark Office connected therewith who are associated with **Customer Number 23557**.

The attorneys/patent agents currently associated with this Customer Number are: David R. Saliwanchik, Reg. No. 31,794; Jeff Lloyd, Reg. No. 35,589; Doran R. Pace, Reg. No. 38,261; Jay M. Sanders, Reg. No. 39,355; Jean Kyle, Reg. No. 36,987; James S. Parker, Reg. No. 40,119; Frank C. Eisenschenk, Reg. No. 45,332; Glenn P. Ladwig, Reg. No. 46,853; Margaret Efron, Reg. No. 47,545; Gwendolyn L. Daniels, Reg. No. 51,594; John M. Sanders, Reg. No. 30,126; Jenna M. Morrison, Reg. No. 55,468; and Mai-Tram Dinh Lauer, Reg. No. 43,589.

I request that all correspondence be sent to:

Glenn P. Ladwig  
Saliwanchik, Lloyd & Saliwanchik  
A Professional Association  
PO Box 142950  
Gainesville, FL 32614-2950

I further request that all telephone communications be directed to:

Glenn P. Ladwig  
352-375-8100

Name of First or Sole Inventor Shabnam Tangri

Residence San Diego, CA Citizenship ~~India~~<sup>85</sup> U.S.A

Post Office Address 5683 Glenstone Way

San Diego, CA 92121

 Date December 2, 2005  
Signature of First or Sole Inventor

.....  
Name of Second Joint Inventor Bianca Mothe

Residence Oceanside, CA Citizenship Brazil

Post Office Address 5419 Gooseberry Way

Oceanside, CA 92057

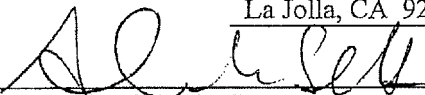
\_\_\_\_\_  
Signature of Second Joint Inventor Date \_\_\_\_\_

.....  
Name of Third Joint Inventor Alessandro Sette

Residence La Jolla, CA Citizenship Italy

Post Office Address 5551 Linda Rosa Avenue

La Jolla, CA 92037

 Date October 13, 2005  
Signature of Third Joint Inventor

.....  
Name of Fourth Joint Inventor Scott Southwood

Residence Santee, CA Citizenship U.S.

Post Office Address 10679 Strathmore Drive

Santee, CA 92071

 Date 10/11/05  
Signature of Fourth Joint Inventor

Name of Fifth Joint Inventor Kristen Briggs

Residence Del Mar, CA Citizenship U.S.

Post Office Address 2454 Mango Way

Del Mar, CA 92014-2919

Date \_\_\_\_\_

Signature of Fifth Joint Inventor \_\_\_\_\_

.....

Name of Sixth Joint Inventor Robert W. Chesnut

Residence Cardiff-by-the-Sea, CA Citizenship U.S.

Post Office Address 1473 Kings Cross Drive

Cardiff-by-the-Sea, CA 92007

Date \_\_\_\_\_

Signature of Sixth Joint Inventor \_\_\_\_\_

.....

Name of Seventh Joint Inventor \_\_\_\_\_

Residence \_\_\_\_\_ Citizenship \_\_\_\_\_

Post Office Address \_\_\_\_\_

\_\_\_\_\_

Date \_\_\_\_\_

Signature of Seventh Joint Inventor \_\_\_\_\_

.....

Name of Eighth Joint Inventor \_\_\_\_\_

Residence \_\_\_\_\_ Citizenship \_\_\_\_\_

Post Office Address \_\_\_\_\_

\_\_\_\_\_

Date \_\_\_\_\_

Signature of Eighth Joint Inventor \_\_\_\_\_